



September 3, 2024

Marlene H. Dortch, Esq.
Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

RE: Wireless Telecommunications Bureau and Office of Engineering and Technology Seek
Comment on NextNav Petition for Rulemaking – WT Docket No. 24-240; RM-11989

Dear Ms. Dortch:

I am writing on behalf of Vivint, a leading home security, life safety, and smart home brand. Vivint is wholly owned by NRG Energy Inc., a leading energy and home services company. Z-Wave, which operates in the 902-928 MHz (“Lower 900 MHz”) band, is the most widely used wireless protocol for the smart home and IoT industries. Our systems rely heavily on Z-Wave technology to provide 24/7 home safety monitoring services and dispatch of police and fire emergency services. For this reason, we are deeply concerned by NextNav’s proposal to reconfigure the Lower 900 MHz band in a way that jeopardizes the Z-Wave protocol in the United States. Reconfiguring the band or removing critical protections would harm both consumers and the industry that makes these products for the following reasons.

Z-Wave’s Role in Securing U.S. Residents’ Homes

Z-Wave has proven to be the most feature-rich, stable, and secure wireless communication standard available for home security and automation technology. The decision to leverage Z-Wave was a deliberate one, rooted in its reliability and interoperability. Unlike other wireless technologies such as Zigbee or Thread, Z-Wave operates on a frequency band that avoids common household interference--making it uniquely suited for mission-critical applications.

Our product line includes Z-Wave radios in:

- Smart locks that secure our customers’ entry doors.
- Smart thermostats that heat and cool homes based on occupancy, save energy, and lower stress on power grids.
- Remote keypads that control access to homes and businesses and provide an easy way to call authorities in case of emergency.

- Hubs that are the central nervous system of our security experience.

Economic and Operational Impact

The proposed reconfiguration of the Lower 900 MHz band could impose significant financial and operational burdens on both industry and consumers. The costs associated with relocating to a different spectrum band, if even feasible, could be prohibitive and impact consumers by either removing product options from the market, rendering existing equipment ineffective, or making new products cost prohibitive. This could significantly jeopardize the availability of these products for consumers and threaten an entire industry offering said products.

Historically, the FCC has balanced multiple interests in the Lower 900 MHz band, including ISM, unlicensed, federal radiolocation, and LMS services. As a result of such balancing efforts, unlicensed systems are used extensively in the band. In fact, contrary to NextNav's assertions that the "Lower 900 MHz Band is underutilized," over 100 million Z-Wave devices are already deployed in more than 35 million homes and offices throughout the country and used on a daily basis.

Conclusion

For these reasons, we respectfully urge the Commission to reject NextNav's petition for rulemaking. The current spectrum allocation and protections have fostered a vibrant and growing ecosystem of devices, including Z-Wave technologies, which have played a pivotal role in advancing the smart home and broader home automation revolutions for over two decades, serving millions of Americans. Undermining this innovation by reconfiguring the band or removing critical protections would seriously harm consumers by impacting their home security, safety, and household energy-management.

Thank you for considering our perspective on this critical issue. We hope the Commission will continue to support the technology standards that have made significant advancements in home automation and assistive technology possible. If we can provide any additional feedback on this, please do not hesitate to reach out to me at jim.nye@nrg.com or our Director of Government Affairs, Lindsay Westfield, at lindsay.westfield@nrg.com.

Sincerely,
/s/ Jim Nye
Jim Nye
Chief Product Officer, Vivint LLC
NRG Energy Inc.